The Growing Missile Gap

Is the time coming soon when the Soviet Union could launch an attack without fearing retaliation?

THOMAS R. PHILLIPS, Brigadier General, U.S.A. (Ret.)

"NOW IT SUFFICES to press but one button, and not only airfields and means of communication of various headquarters but whole cities will be blown sky-high, whole countries can be destroyed," Soviet Premier Nikita S. Khrushchev told the graduates of the military academies at a reception in Moscow on November 14. On another occasion recently, he declared that he had only to press one button and Turkey would be destroyed in a day. Khrushchev was speaking of the capabilities of the thousands of ballistic missiles that the Soviet Union now has emplaced around its perimeter, mostly on its western frontiers.

These statements, and many others of similar tone, were made for internal consumption and not for foreign propaganda. From long experience our intelligence agencies take them seriously and confirm the basis for them. Some of Khrushchev's confidence comes from his having personally witnessed last year the firing of a super intercontinental missile—probably the one he told Senator Hubert M. Humphrey had a range of 14,000 kilometers (8,699 miles). On another occasion he saw the firing of missile salvos of half a dozen each at fire ranges of from two hundred to twelve hundred miles.

In Washington, many officials believe that the Soviet move to drive the Allies out of Berlin, the most critical event since the Second World War in its implications for the West, is a result of Khrushchev's conviction of Soviet military superiority, achieved after years of the most intense and frantic effort. Khrushchev believes that his missiles can now destroy a major portion of the West's retaliatory bombing force, and that any bombers that might survive a missile attack are rapidly being made obsolete by such Soviet air defense as interceptors twice the speed of sound and guided air-defense rockets with a range of a hundred miles and armed with nuclear warheads.

This is what constitutes the "missile gap," a period during which the Soviet Union has the means to blunt much of the power of the West's retaliatory bomber force, and during which it has operational missiles in great numbers that we cannot de-

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fend ourselves against. In contrast to the Soviet Union, with operational missiles of all possible useful ranges, the United States has no operational ballistic missile with a range of more than two hundred miles—the range of the Army's Redstone.

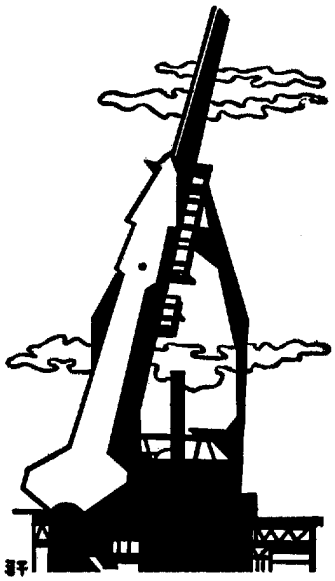
THERE ARE credible reports based on intelligence sources that the Soviet Union has manufactured about 20,000 ballistic missiles with ranges from 150 miles to 6,000 miles and has tested and fired more than a thousand of them. The majority of these are in the short, medium, and intermediate ranges. Missiles with ranges up to 800 or 1,000 miles have been in battle positions in the hands of troops for three years. The 1,800-mile intermediate-range missile has been operational for two years, and the intercontinental missile was operational in small numbers a year ago.

Joseph Alsop published figures last July based on U.S. intelligence estimates that we would have no ICBMs in 1959 while the Russians would have 100; 30 versus 500 in 1960; 70 versus 1,000 in 1961; 130 versus 1,500 in 1962; and 130 versus 2,000 in 1963. These were described by Pentagon sources as optimistic for the Soviet Union. There is, however, every reason to believe that the Russians will meet this estimate of their capability. Khrushchev, in his thesis for the Twenty-first Party Congress, stated on November 14: "The production of intercontinental ballistic missiles has been successfully organized." Robert Hotz, editor of *Aviation Week*, whose sources of information are usually reliable, states that the Soviet Union is now manufacturing more than fifteen intercontinental missiles monthly. It is also reported by a reliable source that the Soviet Union has already manufactured five hundred intercontinental-missile frames.

'Everything's Just Dandy'

Meanwhile, administration officials have been busy denying the U.S. lag. The United States has no operational missiles of intermediate and intercontinental range and no ballistic missiles at all for distances between 200 miles and the intermediate range of about 1,500 miles. And yet Under Secretary of Defense Donald A. Quarles, in an address to the Armed Forces Staff College on January 24, declared: "In the important area of long-range ballistic missiles we are in a 'nip and tuck' race in which neither side could, with assurance, be said to be ahead." Defense Department Director of Guided Missiles William M. Holaday declared last April 28: "It is my personal view that the status of the over-all Soviet missile development is no better than our own at the present time."

But at about the same time Lieutenant General James M. Gavin was writing in his book, *War and Peace in the Space Age*: "Now that the Soviets have an inventory of ICBMs, these will constitute their long-range striking force." In an interview in the *Reader's Digest* for April, 1958, General Curtis LeMay said: "I do not believe they [the Russians] have operational ICBMs in any quantity," implying that they did have them in small numbers.



Senator Henry M. Jackson (D., Washington), who, like others I have quoted, has access to intelligence information, stated last January 30: "By either this year or next year, our entire system of overseas bases will be exposed to Russian IRBM attack. Next year, or the year thereafter, the strategic airbases in our own country will become exposed to Soviet ICBM assault. Meanwhile, vital bases here at home are now open to enemy missiles from the sea."

Writing in the *Space Journal* for December, Donald C. Wakeford of the Huntsville Arsenal says that Soviet launching sites for intercontinental and intermediate-range missiles "have been pinpointed and ballistic flights of their major weapons have apparently been tracked by radar from Turkey. They also have two intercontinental missiles—the T-3 and the T-3a—which are in operation and which can carry hydrogen warheads."

The fact is that the United States has located at least seven Soviet ICBM launching sites in western Russia, and knows where the nuclear warheads are stored. The Japanese have reported the location of five launching sites in the Far East. There are hundreds of operational launching sites for medium- and intermediate-range missiles in the Soviet Union, East Germany, Hungary, Bulgaria, and Albania.

The Built-in Satellite

According to German sources, the Russians were working on a rocket motor of 500,000 pounds of thrust in 1950. It was reported to be operational in 1954 and to comprise the first-stage rocket of the Soviet T3a intercontinental missile. Sputnik III, weighing a ton and a half, was put into orbit by a single-stage rocket, whose thrust is calculated by U.S. experts to be about 825,000 pounds. This probably is the first stage of the super-rocket which Khrushchev says can reach anywhere in the world, and which is undoubtedly the same rocket he told Senator Humphrey about. The U.S. National Aeronautics and Space Agency has just let a contract for the development of a rocket with a million pounds of thrust, but it will not be operational for several years.

The second Atlas successfully launched by the Air Force was aimed skyward and went into orbit. In the final-stage rocket of this missile were a few scientific instruments. The press and radio made false comparisons between the weight of Sputnik III and the orbiting Atlas missile. The fact that the latter was heavier than Sputnik III means little. Most of its weight is accounted for by the final-

stage rocket, which is an integral part of the "satellite." The important thing is the payload launched into orbit. In this case, the Atlas was able to carry about 150 pounds of payload into orbit, while the last Soviet Sputnik, still orbiting, has a payload of 2,919 pounds—or about twenty times as great as the Atlas payload.

WHY DO ALL THE administration spokesmen pretend that we are in a "nip and tuck" race with the Soviets? One reason was given by Holaday in the address previously quoted. He admitted that there was some conflict between the obligation to keep our people informed of the dangers the country faces and the obligation to maintain the West's confidence in our leadership and strength. Former Secretary of Defense Charles E. Wilson justified keeping the situation from the public by asking, "Why scare the people to death?" It seems probable that another reason is that the administration wants to hold down the demand for more military expenditure that would be forthcoming if the public were aroused.

'I Say It Isn't a Gap'

The President, questioned about the missile gap during a press conference on August 27, declared: "There is still a long ways to go before the airplane, I would say, is made completely obsolete. So while, if there is any gap, I am quite certain that our enormous strength in fine long-range airplanes is—I say it isn't a 'gap' . . . in my opinion, the airplane takes care of that deficiency." The President's statement shows that he had not been briefed on recent calculations by the Air Force, which have modified the idea that bombers are substitutes for missiles as long as they can evade guided rockets and manned interceptors. Calculations on the effectiveness of ballistic missiles against surface airbase installations, which I will amplify later, show that ballistic missiles are a greater threat to the manned bomber than even the best air defenses and that in case of a surprise attack the majority of these bombers will never get into the air.

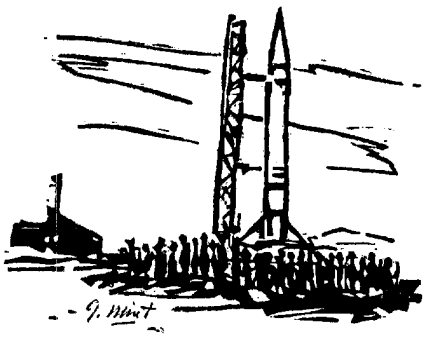
The question of whether the U.S. bomber force can fill the missile gap in the immediate future depends upon two questions:

¶ Can the Soviets with a surprise missile attack destroy a major portion of the U.S. bomber force on its bases?

¶ Will the Soviet air defenses cause such heavy losses in the retaliatory bomber force that it is, in effect, neutralized? Linked to this question is whether United States electronic countermeasures, diversionary missiles, and attacks on Soviet air defenses will be able to decrease the effectiveness of the defenses materially.

The first question must be divided into two parts: What is the Soviet threat to SAC overseas bases? What is the Soviet missile threat to SAC bases in the United States?

The Russians have thousands of missiles emplaced and ready to fire on U.S. overseas bases. Their missiles are known to be accurate within about two-tenths of one per cent of their range. This is adequate for use with a nuclear warhead at these ranges. One scientist, with access to U.S. intelligence in the course of his work, told me that we might as well throw away our overseas bases for all the value they would have in a full-scale war. This, however, does not mean that they should be abandoned now, since they would have



great value in anything less than full-scale war.

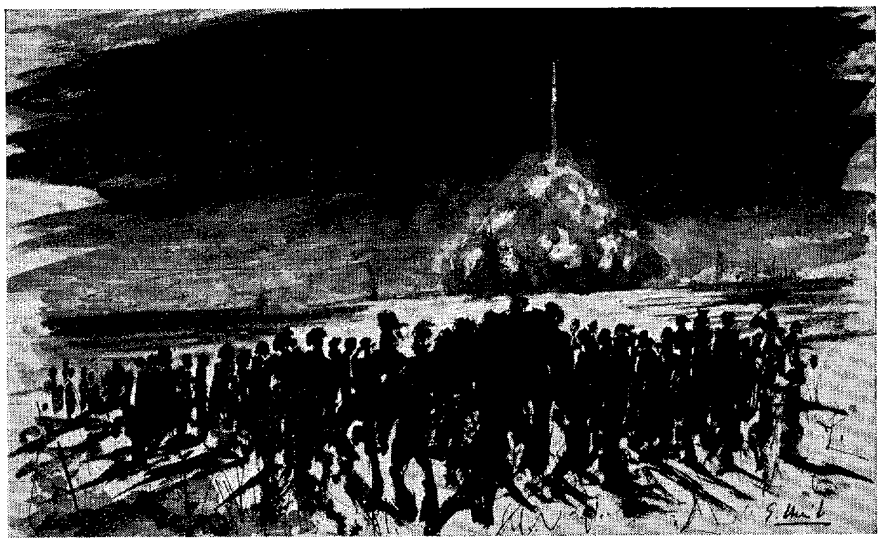
Nor does it mean that the U.S. bomber forces on the bases would be completely wiped out. SAC keeps from six to twenty per cent of its bombers, depending upon the situation, in the air at all times, so these will not be destroyed in a surprise attack. Nor will all missile attacks be successful. Nevertheless, Air Force planners talk in terms of the loss of seventy-five per cent of the aircraft on overseas bases in a full-scale surprise nuclear attack. In addition to the SAC bases overseas, there are some three thousand U.S. and Allied tactical aircraft, more than half of which could carry nuclear weapons to European Russia. It cannot be anticipated that all of them could be destroyed on their bases, but a great many could be.

U.S. Deterrence: From Massive to Minimum

The calculations by which the scientists and military planners reach the conclusion that Soviet ballistic missiles are such a total threat to the U.S. strategic bomber force are complex. But these calculations are resulting in a whole new strategy of war, which—together with the lag in missile development in the United States—is ending up in a theory called "minimum deterrence." In essence the theory admits that a large portion of our present forces cannot survive a large-scale surprise missile attack. Our remaining retaliatory forces would be unable to knock out hostile offensive bases but might destroy thirty or fifty cities. Our retaliatory threat, instead of being overwhelming, as we have considered it in the past, with its first target the enemy's offensive forces, now becomes a threat which declares to a potential enemy: "If you attack my military bases, I will respond with what I have left by attacking your major cities." The steady improvement in Soviet military posture, with no relative improvement in our own, has reduced us to this unenviable position.

The following calculations, based on public information of the effectiveness and accuracy of Soviet missiles, demonstrate how important missiles have become in the latest strategic thinking. It is assumed that there are four hundred NATO and U.S. airbases eight hundred to twelve hundred miles distant from Soviet missile installations. The announced accuracy of Soviet missiles at that range is a probable error of two miles (meaning half of them will fall this close to the target), and the explosive force of the Soviet missile warheads is five megatons (five million tons of TNT), which is capable, according to the Atomic Energy Commission, of destroying all but the heaviest surface structures with-

in a radius of 6.2 miles and killing eighty-five per cent of the human beings within this area. (The five-megaton bomb that Humphrey reported was in reality the Soviet five-megaton missile warhead.) Calculation shows that an average of two missiles would have to be fired to obtain a ninety per cent possibility of destroying an airbase. Eight hundred missiles would be sufficient to wipe out the major part of Allied airpower overseas.



WHY CANNOT the Allies wipe out Soviet missile bases? Here comes the awful mathematics of missiles. The U.S. missiles have a warhead of from one-third to one-fifth the power of the Soviet warhead. There have not been enough firings to determine accuracy realistically, but at the present time our missiles are not more than three-quarters as accurate. With these disadvantages, calculation shows that it would take thirty-three U.S. missiles to give a ninety per cent assurance of destroying a hidden or underground Soviet missile installation. This is based on the assumption that the bomb would have to be a surface burst within a quarter of a mile from the installation; the lip of the crater extends that far.

It would take fifteen Soviet missiles, with their heavier warheads, to destroy an Allied underground missile-launching pad. To destroy ninety per cent of a thousand U.S. pads, fifteen thousand Soviet missiles would be required, while thirty-three thousand U.S. missiles would be needed to destroy ninety per cent of a thousand Soviet pads. For either side, the effort to destroy missiles emplaced in underground or hardened pads, or effectively concealed, is so great that it is not a feasible objective with present missile accuracy and warheads. If both sides had missiles underground or hidden, there would be a standoff, since neither side could destroy the retaliatory force of the other. But when one side has missiles and the other depends upon airbases which cannot be hidden and can be destroyed with relative ease, the situation of the latter is calamitous. It has only a "minimum deterrent" and is a victim of the missile gap.

The situation is more favorable with regard to Strategic Air Command retaliatory bases in the United States. Soviet intercontinental ballistic missiles now operational are too few in number to be a serious threat to all the SAC bases in the United States. Calculations of missile probability of hitting and destruction at this range indicate that six—instead of two—Soviet intercontinental ballistic missiles would have to be fired at each base to give a ninety per cent probability of destruction.

If official estimates of Soviet production of intercontinental missiles are accurate, the threat will become serious within two years and overwhelming in three. The whole retaliatory and deterrent capacity of SAC, both overseas and at home, can be wiped out by 1961 or 1962.

Quiet, Deep, and Deadly

There is also a real threat from submarine-launched ballistic missiles. Marshal of the Soviet Air Force K. A. Vershinin said in an interview September 8, 1957: "Submarines have also become formidable weapons as they can be used to shell coastal cities and even other targets with rocket weapons carrying atomic and hydrogen warheads." Admiral Hyman G. Rickover declared last September 29: "It is common knowledge that the Soviets can now launch from their submarines missiles with a range of at least 200 miles. Before too long missiles from submarines will reach any target in the United States."

Earlier last year Rickover said he was being conservative in saying "at least 200 miles." A November, 1957, article in *Soviet Fleet,* the official newspaper of the Soviet Navy, asserted: "Submarines are armed with rockets [ballistic missiles] with a firing range of 1,200 kilometers [about 745 miles] which can be launched from subsurface and surface positions." This report can be given full credence. It is not official propaganda, since it was published in a professional paper read by naval officers who would know if it were false.

It has been well known for some time that the Russians have had submarine-launched solid-propellant ballistic missiles. The one referred to in *Soviet Fleet* is the Comet II. They also have an operational ballistic missile, towed in a container by a submarine and capable of being launched underwater. Its range is about 400 miles. An experimental missile of this type has a range of more than 1,300 miles. Three of them can be towed by a 1,500-ton submarine. Such missiles are probably designed to be anchored in place and fired by remote control.

The U.S. Navy has recently declassified an intelligence report to the effect that the Soviet Union has fifty ballistic-missile-firing submarines. Another report from naval sources stated that there had been a thousand sightings of Soviet submarines in three years in the western Atlantic. Senator Jackson declared in a press release last January 22: "Our best military intelligence is that the Russians have been working on comprehensive radar charts of the United States coastlines. This means that a Soviet submarine commander will

be able to surface 100 miles off the American coastline, take radar fixes for position and launch his missiles with frightening accuracy." In addition there are reliable reports that Soviet submarines are constantly on station off the U.S. coastline, are regularly relieved, and occasionally crews are exchanged.

The Russians have, according to official naval statements, about five hundred submarines, of which two hundred to 250 are long-range ocean types. The editors of *Missiles and Rockets* stated in their October, 1957, issue: "the Red Fleet uses Arctic waters as a proving ground and test range, and a large portion of the submarine fleet is being equipped for missile handling. These submarines with IRBMs can do what the ICBM is not yet ready to do."

In the face of such evidence, Secretary of the Air Force James H. Douglas told the Air Force Association last October: "We know also that the Soviets could be developing ballistic missiles to launch from submarines. Factual evidence in this area is lacking." The President was asked in April during a press conference about reports that Soviet submarines were reconnoitering American territorial waters. He replied: "As a matter of fact, I don't know what has been stated. I don't know of any facts that haven't been published. But you are making a statement that there is a, rather a campaign, along our coasts. You'll have to get the facts on that one because I haven't any such facts." Rear Admiral Rawson Bennett, Chief of Naval Research, testified before Congress in 1957, "At this point we are not in a very rapid state of advance in anti-submarine warfare."

Last August, the Underseas Warfare Advisory Panel to the Military Applications Committee of the Joint Congressional Committee on Atomic Energy released a report that stated:

"The Soviets could mount a devastating nuclear attack [from submarines] against the United States early in the 1960s;

"Our existing defenses could not stop such a missile attack;

"No weapons system now in existence, even on an experimental basis, offers an adequate defense against non-snorkeling submarines which run quiet and deep."

However, despite Senator Jackson's fears of their "frightening accuracy," ballistic missiles launched from submarines are inherently inaccurate. To the normal low degree of accuracy of a long-range missile they add the inaccuracy of location of the ship's position and problems of launching from an unstable platform. (This is equally true of the U.S. Navy's Polaris, of which one submarine and fifteen missiles may be operational in 1960 or later.) For this reason, submarine-launched missiles are not so serious a threat to SAC bases in the United States as land-based missiles are to our overseas bases. However, it can be expected that SAC bases near the coast would be the object of attack by Soviet missile-launching submarines.

McElroy Said It

The official conclusion from these considerations, both in the Soviet Union and in the United States, is that bombers still are needed where accuracy is essential. One B-52 can carry twenty-five or more bombs, each with an explosive yield equal to that of the warhead of U.S. ballistic missiles. It should be noted, however, that Soviet ballistic missiles, with warheads of five-megaton explosive capacity, are three to five times more powerful than comparable U.S. missiles of the same type. The rockets to carry these Soviet warheads were designed before the art of packing great nuclear explosive power in small packages had been perfected. The Soviet T-3 intercontinental missile, for example, has about twice the thrust of the U.S. Atlas.

The United States has no operational intermediate or intercontinental ballistic missiles, so bombers will have to do the job if they can. They are the preferred means of delivery if they can make delivery. Whether or not those that are left after a missile attack are able to penetrate to their target is the second vital question that determines the extent of the missile gap.

It is known that the Russians have developed an advanced air-defense guided missile similar to the U.S. Nike Hercules. It carries a nuclear warhead, has a range of about a hundred miles, homes on the target by infrared, and is reported to be able to outmaneuver any airplane. Its kills are reported as ninety-eight per cent. The Russians are known to be building a wholly new air-defense system at a frantic rate. This system, about twice as large as that of the United States, uses radar and computers similar to our SAGE system. The Russians have two types of Mach 1.9 interceptors (about 1,300 miles per hour) in operation—the MIG-21 and the Sukhoi Delta, and supersonic all-weather interceptors. Their radar is reported to be superior to that used in the U.S. air-defense system.

In testimony before the House Appropriations Committee on November 20, 1957, in response to a question about how long our bombers would be effective as a deterrent —in other words, when would Soviet air defenses neutralize them—Secretary of Defense Neil H. McElroy said: "I would believe that would be true [that they could get through Soviet air defenses] certainly for a year, and I think, in my judgment, it would be equally true two years from now." Representative George H. Mahon (D., Texas), who is briefed on such matters, was less optimistic. He said: "I have felt confident in our position of mutual deterrence during the past twelve months, but I do not feel as confident about the next two years as I have previously felt. . . ."

THE AIR FORCE has long been committed to the thesis that the bomber always gets through. But it has never been up against anything like guided air-defense missiles. It is working frantically on counter-radar measures, on decoy missiles, some intercontinental and some carried by bombers, on bomber-carried 600- to 800-mile ballistic missiles, on diversionary tactics, on saturating the control systems of the defense, and finally on preliminary destruction of the air defenses by missiles to clear a relatively safe route.

Electronic countermeasures have not lived up to the early hopes placed in them. The ground electronic systems can shift frequency by pressing a button, and can do so much faster than the airplane equipment can detect the new frequency and jam it. Infrared homing devices cannot be jammed by any known

means. Bomber-launched ballistic missiles will be even less accurate than submarine-launched missiles and of low yield. Decoy missiles, although painted to give a radar reflection similar to the bomber, will unquestionably be sorted out and identified in time, just as is aluminum chaff (strips of aluminum foil scattered through the air to confuse radar trackers). The main hope at present is saturation of the defenses or their preliminary destruction. Saturation, sending in more aircraft from different directions than there are control systems, means heavy losses, even though some get through. Whether or not the air defenses can be knocked out in advance is unpredictable. But our bombers will also have to meet and pass the air-to-air guided missiles armed with nuclear warheads that Soviet interceptor aircraft will hurl against them.

The most hopeful measures against air defenses is to fly close to the ground where radar is ineffective. This uses fuel at an astronomical rate, since current jet bombers are built for flying at high altitudes. Nevertheless, the Air Force has modified its B-47 fleet so that the medium bombers can carry out what is known as toss bombing—where the bombers approach low, soar skyward to hurl the bomb in a high trajectory, and then escape by getting back close to the ground. There is a short period in this maneuver, however, when the bomber is a perfect target. The modification of the B-47 has not increased its low-altitude range, but has strengthened it to withstand the bombing maneuver.

The effectiveness of modern air-defense systems against manned bombers probably cannot be determined except in war. In the meantime, the bomber advocates are sure they will get through, while the air-defense experts are equally certain that losses will be so great that the bomber force will disappear after a few raids.

In contrast to the U.S. Air Force's continuing faith in bombers, Soviet Air Marshal Vershinin said in the interview previously quoted: "Bombers are, of course, still being built. [The Russians are building four intercontinental bombers a month.] And the United States lays particular emphasis on making them. But rocket weapons today make questionable the wisdom of developing bomber forces because the former are more dependable and surer weapons. For a rocket to fail to reach the target is practically out of the question. None of the modern anti-aircraft means are effective against them."

A Bird in the Bush

The United States has been busy for three years counting its missiles before they are hatched. Atlas ICBM has had two successful full-scale tests.

Thor IRBMs have also had two successful full-scale tests; but even before they had any, one or more had been sent to Great Britain as operational missiles, although it was estimated that their reliability was considerably less than fifty per cent. The Jupiter IRBM has had two successful full-scale tests. Polaris has had no successful full-scale test. All our tests, except the two latest Thor tests, have been fired by scientists and not by soldiers. In the last test of Jupiter, supposed to be the final test firing of this missile by scientists, the Jupiter blew up on its launching pad, so the scientists will have another go at it.

In England, on April 23, 1956, Khrushchev declared: "I am quite sure that we will have a guided missile with a hydrogen warhead that can fall anywhere in the world."

Was this an idle boast? Intelligence since then indicates that it was not. The Russians had fired their ICBMs in the northern missile range along the Siberian coast to distances of more than 3,000 miles. The problems of accurate guidance and nose-cone re-entry had not been solved, but the propulsion problem had. Late in 1956 the Russians started testing their ICBM at the missile range north of the Caspian Sea, extending 4,500 miles to the Kamchatka Peninsula. They have made more than fifty test firings; how many were successful full-scale tests we do not know. When Khrushchev made his boast, the Russians were undoubtedly ahead of where we are now in missile development.

Although the U.S. missile program has had very great success after a slow start, the production program has always been inadequate. Only twelve to fifteen intermediate squadrons, 200 to 250 missiles, were programmed. Only twenty intercontinental squadrons were programmed, fewer than 200 missiles. Half of these ICBMs may be lost in the 1960 budget.

OUR SIGHTS appear to have been set so low because of lack of understanding of the nature of missiles. Artillery has a recognized range of error and it is never hoped to hit a target with one shot. Dozens may have to be fired on a single target. Missiles are like artillery, only their error is measured in miles, rather than yards. In preparing to retrieve the Atlas warhead after its recent 6,325-mile flight, an area about thirty miles in diameter was

watched. This indicates an estimated circular probable error of fifteen miles' radius. The reported Soviet error for 5,000 miles is ten miles. But the point is that to ensure hitting a target with Atlas, or any other long-range missile, a number of shots, or a salvo—the numbers needed being dependent upon the expected error, the size of the burst, and the extent of the target—is required.

Considering the low degree of accuracy and the unreliability of the U.S. intercontinental missiles, our twenty squadrons would give us, when we have them, a chance at about twenty targets. With the intermediate-range missile, our twelve or fifteen squadrons would give us perhaps thirty or forty targets. A Polaris submarine, with fifteen missiles of still lower accuracy, could take on two or three targets.

The argument made by those who are satisfied with or who justify these programs is that solid-propellant rockets, the Minuteman and the land-based version of Polaris, will be coming in soon. But no one really knows how soon. The problems involved in getting satisfactory combustion with chunks of solid propellant eight and more feet in diameter are far from solved. General LeMay said August 23 that the Minuteman "is at least several years from being a fact, but research and development leading to this system is well on its way." But in the meantime production orders on other missiles has been limited. The United States is letting go a bird in the hand for a bird in the bush.

WHAT IS NEEDED now to start closing the missile gap, a gap that currently is widening, is to build several times more than are now planned of the missiles that already have been developed and are in early production—the Jupiter and Thor IRBMs and the Atlas and Titan ICBMs. It is surprising that although the hardened missile pads now planned for these missiles cost two-thirds as much as the missiles themselves, no reserve missiles are being provided that can be fired after the first ones have been used. It is like putting a cannon into battle line with only one shell for it to fire. Behind this peculiar planning are such reasons as economy in defense, unwillingness to spend on weapons that soon may become obsolete, slowness in accepting the awful mathematics of missiles and evaluating their effect on strategy, and, most important of all, the unwillingness of top civilian officials of the government to accept incontestable intelligence reports of Soviet advances.

Recent successful developmental tests of our ballistic missiles indicate that the hard work and expenditures of the past three years are beginning to pay off. But these tests should not blind us to the fact that it's going to be a long time before we have an adequate number of operational ballistic missiles.

The missile gap need not necessarily mean war. But when the Communists are certain that the West is too weak and confused to stand against them, crises caused by Communist pressures all over the world may be expected to succeed each other in orderly procession as Communist expansion moves ahead.

The Sham Battle over 'Spending'

Can we afford the extravagance of thrift and drift?

DAVID DEMAREST LLOYD

THE PRESIDENT has announced that he will devote his remaining years in the White House to a campaign against government spending. To prove that this is not an idle threat, the directives have gone out to the departments to slash their budget estimates and the usual expenditures ceiling has been slapped on the Defense Department, throwing the procurement of military hardware into the customary turmoil and confusion. The Democratic leaders, still smarting under the President's campaign rhetoric, have announced that they are not "spenders" either, and that when the budget comes to Capitol Hill they will slash it as they have before. The stage is thus set for the great yearly spectacle of the economy drive—and this when the country is still not entirely out of the recession doldrums, the Soviets are pulling ahead of us in armament and initiative, and our unmet needs for every form of public improvement, from schools to roads, cry out for more, not less, public spending.

Only the naïve, however, would conclude from all this—or even from the President's statement that he will present a balanced budget of about $77 billion—that Federal expenditure will be cut substantially. After the ceremonial struggle has been staged, the budget and the rate of spending will remain about the same. Still unanswered will be the question of whether this result is good enough for what the nation needs. Yet it is of the greatest urgency that a full-scale debate be started on one of the most fundamental issues of our time: the formulation of an adequate, sensible, and long-range policy of public spending.

IN SPITE OF all the ritual exorcising, the Federal budget rises steadily. Its rate of increase is generally greater than the rise in the price level. The press and the higher levels of government profess to regard this tendency with indignation, even with horror, as if it were a nervous disorder that could be cured by will power and moral preaching.